ORDER NO. HAD8706174A4

Service Manual

Amplifier

Stereo Integrated Amplifier

SU-V76

Color

(K).....Black Type

Area

Color	Area
(K)	(PA).....Far East PX.
(K)	(PE).....European Military.

Please use this manual together with the service manual for Model No.SU-V76, Order No.HAD8704068C1.

CHANGES

■ REPLACEMENT PARTS LIST

Note: Mentioned in this parts list are only those different from Model No.SU-V76 (Black Type) for the destination (M) area.
Important safety notice : Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Ref.No.	Change of Part No. SU-V76 (M) → SU-V76 (PA,PE)		Part Name & Description	Remarks
INTEGRATED CIRCUITS				
IC101	AN6557FLC	**M5218L**	Operation Amplifier	Change
TRANSISTORS				
Q761	----------	**2SC3311A**	Switching	Addition
Q762	----------	**2SA1309A-R**	Switching	Addition
DIODES				
D761	----------	**MA165**	Switching	Addition
D762	----------	**MA4082M**	8.2V , Zener	Addition
TRANSFORMER				
T701 ⚠	SLT5P268-KK	**SLT5P279**	Power Source	Change
FUSES				
F1 ⚠	XBA1F50NU14	**XBA2C40TRO**	250V , T4A	Change
F2 ⚠	----------	**XBA2C20TRO**	250V , T2A	Addition
SWITCH				
S16 ⚠	----------	**ESE37263**	Voltage Selector	Addition

Ref.No.	Change of Part No. SU-V76 (M) → SU-V76 (PA,PE)		Part Name & Description	Remarks
RESISTORS				
R554	ERDS2TJ822	**ERDS1FUJ472**	Carbon , 1W , 4.7kΩ , ± 5%	Change
R761	----------	**ERDS2TJ223**	Carbon , 1/4W , 22kΩ , ± 5%	Addition
R762	----------	**ERDS2TJ223**	Carbon , 1/4W , 22kΩ , ± 5%	Addition
R763	----------	**ERDS2TJ223**	Carbon , 1/4W , 22kΩ , ± 5%	Addition
R764	----------	**ERDS2TJ223**	Carbon , 1/4W , 22kΩ , ± 5%	Addition
R765	----------	**ERDS2TJ392**	Carbon , 1/4W , 3.9kΩ , ± 5%	Addition
R766	----------	**ERDS2TJ392**	Carbon , 1/4W , 3.9kΩ , ± 5%	Addition
CAPACITORS				
C701	ECKWNS103ZV	**ECKDKC103PF**	Ceramic , 400V ,0.01μF , +100% , -0%	Change
C761	----------	**ECEA1CK100B**	Electrolytic , 16V ,100μF	Addition
CABINET AND CHASSIS				
6	SBC666-1	**SBC666-5**	Button , Power	Change
17	SKC1950K991	**SKC1950K992**	Cabinet	Change
23 ⚠	SJS9234B	**SJS9231-1B**	AC Inlet	Change
24 ⚠	SJS9233B	**SJS9232B**	AC Outlet	Change
28	SGPUV76-KM	**SGP7111-6A**	Rear Panel	Change
29	SJS9234A	**SJS9231A**	AC Inlet Cover	Change
30	SJS9233A	**SJS9232A**	AC Outlet Cover	Change
33	SXE1156	**SXE1163**	Heat Sink	Change
34	----------	**SHE174**	Tool	Addition
35	----------	**SUS271**	Spring	Addition
36	----------	**SMEZ960-KE**	Bracket	Addition
37	----------	**SHW21S40**	Washer	Addition
38	----------	**SDX323**	Wheel	Addition
39	----------	**MMN6C2RKMS**	Motor	Addition
40	----------	**SME97-1**	Angle	Addition
41	----------	**SHG6267**	Rubber	Addition
42	----------	**XTBS3 + 10JFZ**	Screw	Addition
ACCESSORIES				
A1 ⚠	SJA172-1	**SJA168-1**	AC Cord	Change
A3	SQF12869	**SQF13029**	Instruction Book	Change
A4 ⚠	----------	**SJP9215**	Plug	Addition
PACKING				
P1	SPG5876	**SPG6085**	Carton Box	Change
P2	SPS4714-1	**SPS4751-2**	Pad , Left	Change
P3	SPS4715-1	**SPS4752-2**	Pad , Right	Change

Technics

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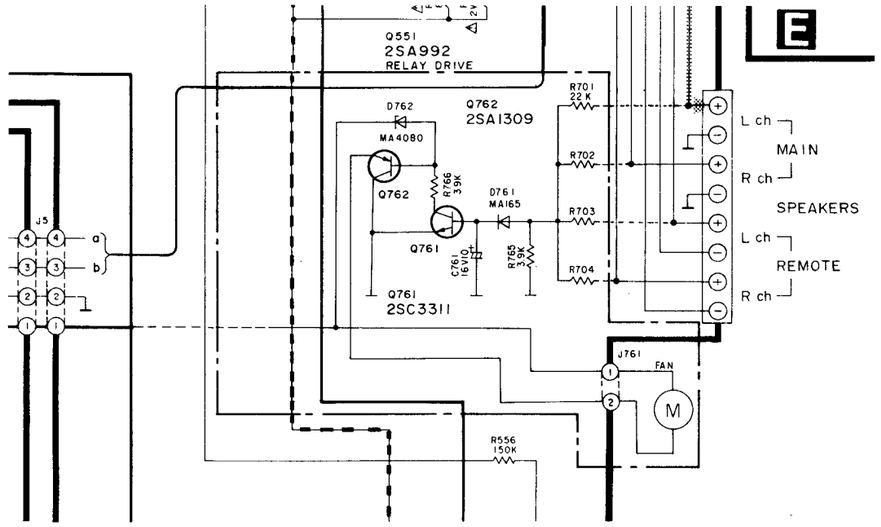
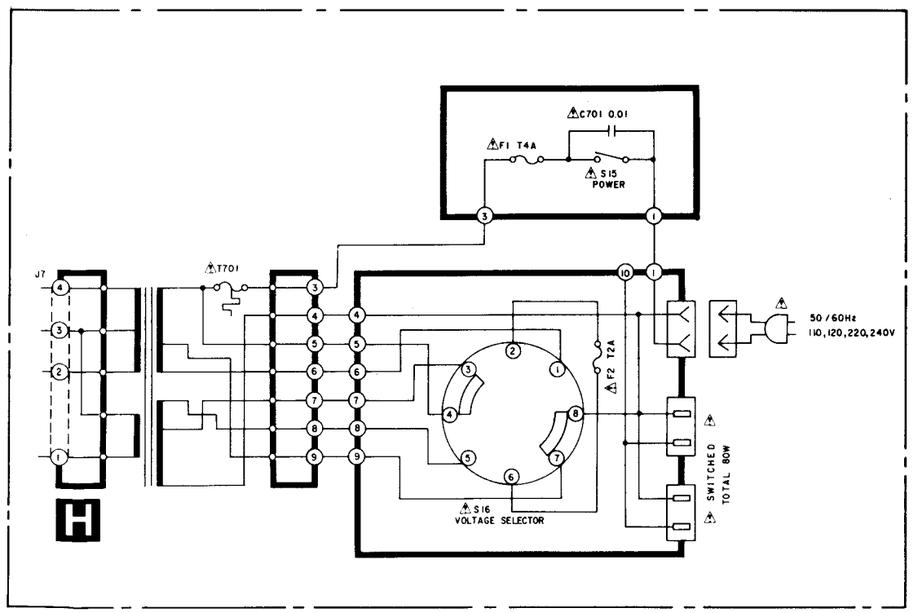
Tokyo 105,Japan

■ SCHEMATIC DIAGRAM

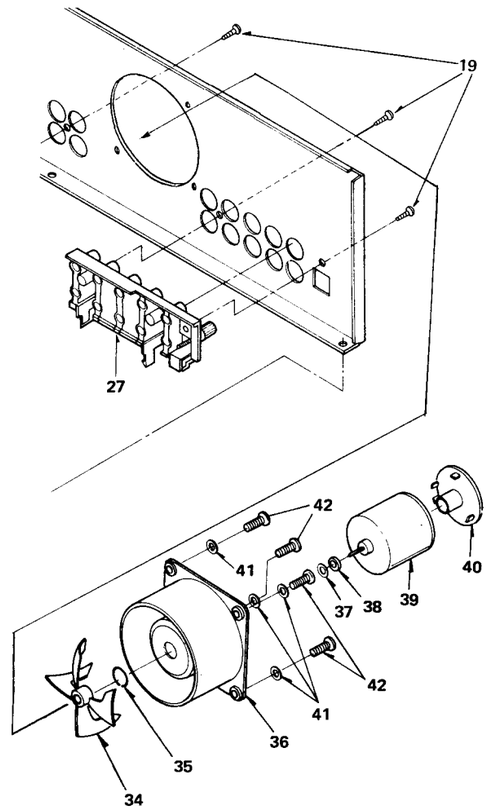
• Addition of fan circuit



• Change of power source circuit



■ EXPLODED VIEW



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ORDER NO. HAD8704068C1
A2

Service Manual

Stereo Integrated Amplifier

Amplifier

SU-V76

Color

(K) .... Black Type

Color	Areas
(K)	[M] ..... U.S.A.
(K)	[MC] ... Canada.

Systems

SC-A610, SC-A620, SC-A630

SPECIFICATIONS (IHF' 78)

■ **AMPLIFIER SECTION**

Rated minimum sine wave RMS power output
20 Hz~20 kHz both channels driven
0.05% total harmonic distortion
100W per channel (8 ohms)

1 kHz continuous power output
both channels driven
0.05% total harmonic distortion
105 W per channel (8 ohms)

Dynamic headroom 1.5 dB (8 ohms)

Total harmonic distortion
half power at 1 kHz 0.03% (8 ohms)

SMPTE intermodulation distortion
0.05% (8 ohms)

Frequency response
PHONO RIAA standard curve ±0.8 dB
TUNER, CD/AUX, TAPE 1, TAPE 2/EXT
10 Hz~80 kHz, −3 dB

Input sensitivity
PHONO 0.3 mV (2.5 mV, IHF '66)
TUNER, CD/AUX, TAPE 1, TAPE 2/EXT
17 mV (150 mV, IHF '66)

S/N (IHF, A)
PHONO 74 dB (71 dB, IHF '66)
TUNER, CD/AUX, TAPE 1, TAPE 2/EXT
78 dB (97 dB, IHF '66)

Maximum input voltage
PHONO 130 mV (140 mV, 1 kHz)

Input impedance
PHONO 47 kilohms
TUNER, CD/AUX, TAPE 1, TAPE 2/EXT
18 kilohms

Tone controls
BASS 50 Hz, +10 dB~−10 dB
TREBLE 20 kHz, +10 dB~−10 dB
Super bass 80 Hz, +6 dB

Output voltage
TAPE 1, 2 REC OUT 150 mV

Low frequency damping factor 45 (8 ohms)

Load impedance
MAIN or REMOTE 8~16 ohms
MAIN and REMOTE 8~16 ohms

■ **GENERAL**

Power consumption 350W, 460 VA

Power supply AC 120V, 60 Hz

Dimensions (W×H×D) 430 × 119 × 240 mm
(16-15/16" × 4-11/16" × 9-7/16")

Weight 6.5 kg (14.3 lb.)

Note:
Total harmonic distortion is measured by the digital spectrum analyzer (H.P. 3045 system).

Note:
Total harmonic distortion is measured by the digital spectrum analyzer (H.P. 3045 system).
Specifications are subject to change without notice for further improvement.

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Technics

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System Ass'y		Name / System	Amplifier	Tuner	Tape Deck	Turntable	Graphic Equalizer		CD Player (Option)		Speaker System
SC-A610	=	SD-A610	SU-V76	ST-S76	RS-T16	SL-BD26U	——	+	SL-P117 or SL-P118	+	SB-2725
SC-A620		SD-A620	SU-V76	ST-S76	RS-T16	SL-BD26U	SH-8016		SL-P117 or SL-P118		SB-2725
SC-A630		SD-A630	SU-V76	ST-S76	RS-T16	SL-BD26U	——		SL-P117 or SL-P118		SB-2745

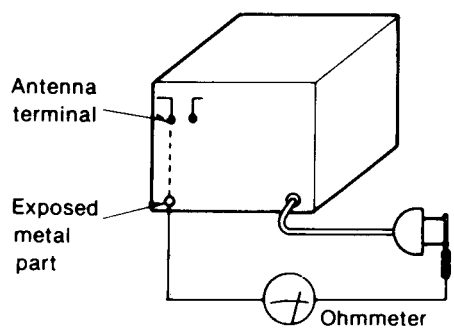
■ SAFETY PRECAUTION (This "Safety Precaution" is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

• INSULATION RESISTANCE TEST

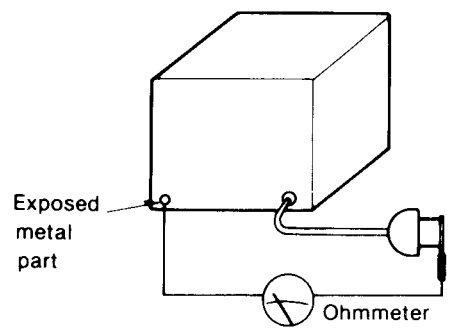
1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between 3MΩ and 5.2MΩ to all exposed parts. (Fig. A) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. B)

Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.



(Fig. A)

Resistance = 3MΩ—5.2MΩ



(Fig. B)

Resistance = Approx ∞

4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

■ PROTECTION CIRCUITRY

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

■ BEFORE REPAIR

Disconnect AC power, Discharge both Power Supply Capacitors C703 and C704 through a 10Ω, 5W resistor to ground.
DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may distroy solid state devices.
After repairs are completed, restore power gradually using a variac, to avoid overcurrent.
Current consumption at 120V, 60Hz in NO SIGNAL mode should be 230 ~ 390mA.

■ LOCATION OF CONTROLS

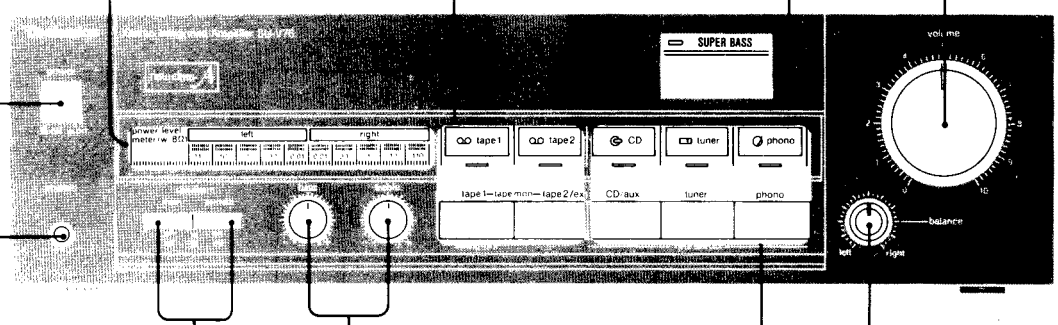
•Power switch (power)

•Peak-power meters (power level meter)
These meters indicate the peak-power value of the output level to the speaker systems.

•Tape-monitor selectors/indicators (tape mon)
When the indicator for the "tape 1" selector illuminates:
You can play back or monitor the sound from tape deck of this system or to record from tape deck of this system to a second tape deck connected to the "TAPE2/EXT" terminals. Also, for SD-A620 system you can adjust the tone quality by using the graphic equalizer.
When the indicator for the "tape2/ext" selector illuminates:
You can play back or monitor the sound from a second tape deck, etc. connected to the "TAPE2/EXT" terminals.
When neither indicator illuminates:
You can listen to the sound source selected by one of the input selectors.
Note:
If both indicators illuminate, only the sound from equipment connected to the "TAPE2/EXT" terminals will be heard.

•Super bass switch/indicator (SUPER BASS)
Low frequency sounds are reinforced when this button is pressed.
(The indicator above the button will illuminate.)

•Volume control (volume)
This control is used to adjust the volume level.



Amplifier

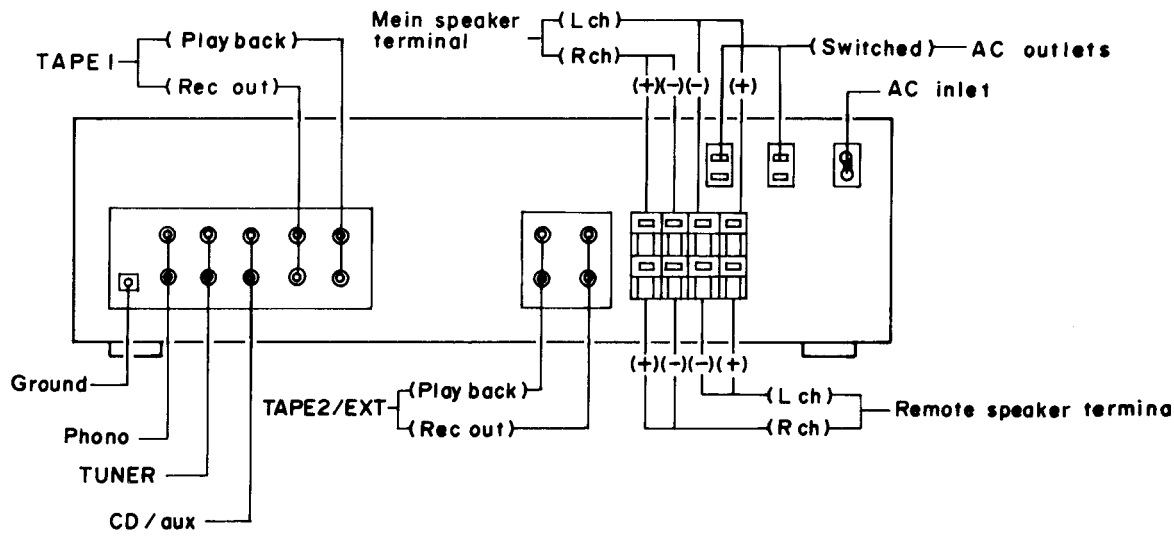
•Headphones jack (phones)

•Tone controls (bass/treble)
The bass control is for the low-frequency sound range, and the treble control is for the high-frequency sound range.

•Balance control (balance)
This control is used to adjust left/right volume balance.

•Speaker selectors (speakers)
main (■→▲):
When this selector is pressed inward sound can be heard from the speaker systems connected to the "MAIN" terminals.
remote (■→▲):
When this selector is pressed inward sound can be heard from the speaker systems connected to the "REMOTE" terminals.
Note:
When only one system of speakers is connected, no sound will be heard if both selectors are pressed.

•Input selectors/indicators (input selector)
These selectors are used to select the sound source to be heard, such as a disc, radio broadcast, etc. The corresponding indicator illuminates during operation to indicate the selected sound source.



D

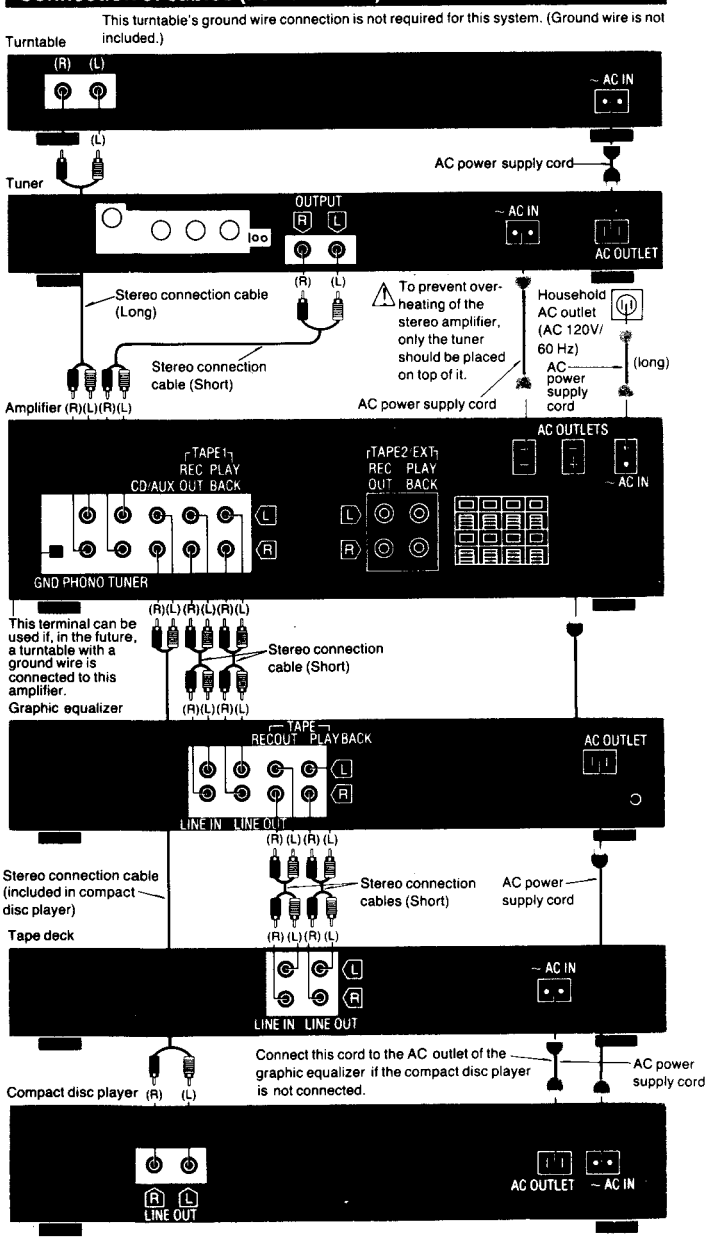
■ HOW TO CONNECTION

Note:
Be sure to use the power cord included with each unit, because some power cords are polarized and some are non-polarized (plug shapes are different).

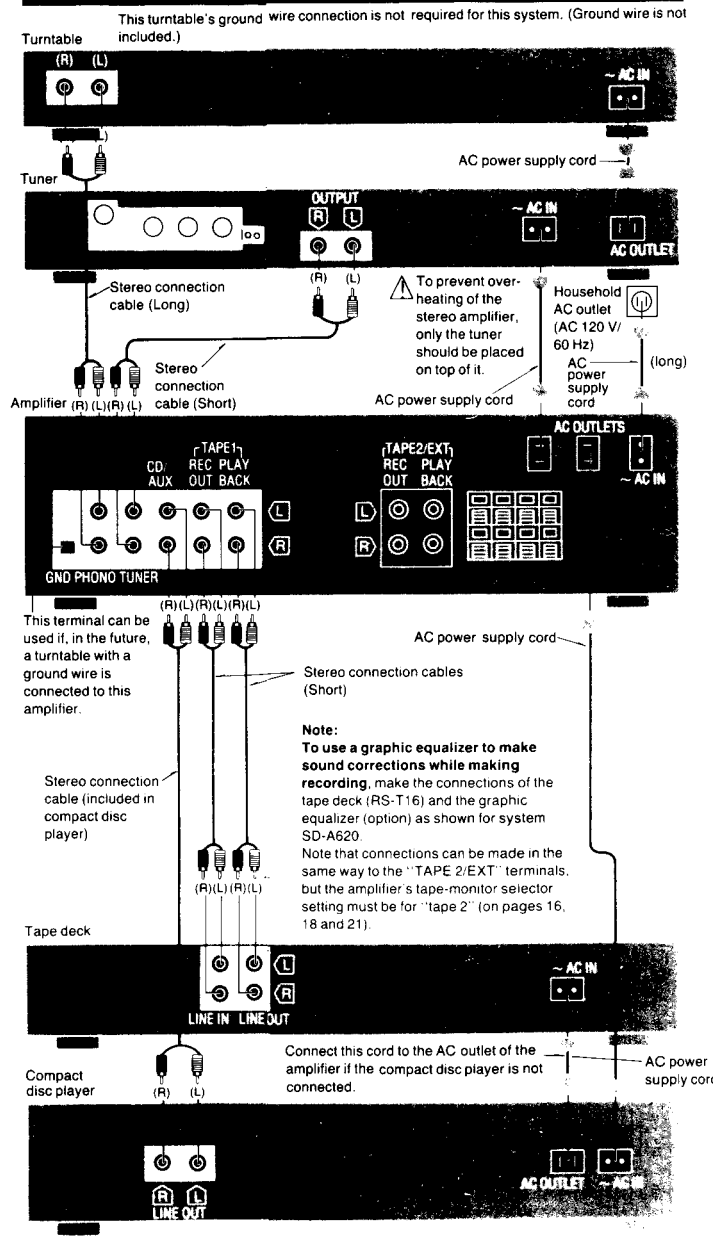
(continued)

CAUTION
TO PREVENT ELECTRIC SHOCK MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

Connection of cables (For SD-A620)


This turntable's ground wire connection is not required for this system. (Ground wire is not included.)
Turntable
(R) (L)
~ AC IN
(L)
AC power supply cord
Tuner
OUTPUT
R L
~ AC IN
AC OUTLET
(R) (L)
Stereo connection cable (Long)
To prevent overheating of the stereo amplifier, only the tuner should be placed on top of it.
Household AC outlet (AC 120V/ 60 Hz)
AC power supply cord
(long)
Stereo connection cable (Short)
Amplifier (R)(L)(R)(L)
AC power supply cord
AC OUTLETS
~ AC IN
TAPE1 REC PLAY CD/AUX OUT BACK
TAPE2/EXT REC PLAY OUT BACK
GND PHONO TUNER
This terminal can be used if, in the future, a turntable with a ground wire is connected to this amplifier.
(R)(L)(R)(L)(R)(L)
Stereo connection cable (Short)
Graphic equalizer
(R)(L)(R)(L)
TAPE RECOUT PLAYBACK
AC OUTLET
LINE IN LINE OUT
(R) (L) (R) (L)
Stereo connection cable (included in compact disc player)
Stereo connection cables (Short)
AC power supply cord
Tape deck
~ AC IN
LINE IN LINE OUT
Compact disc player (R) (L)
Connect this cord to the AC outlet of the graphic equalizer if the compact disc player is not connected.
AC power supply cord
R L
LINE OUT
AC OUTLET ~ AC IN

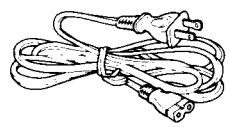
Connection of cables (For SD-A630/A610)


This turntable's ground wire connection is not required for this system. (Ground wire is not included.)
Turntable
(R) (L)
~ AC IN
AC power supply cord
Tuner
OUTPUT
R L
~ AC IN
AC OUTLET
(R) (L)
Stereo connection cable (Long)
To prevent overheating of the stereo amplifier, only the tuner should be placed on top of it.
Household AC outlet (AC 120 V/ 60 Hz)
AC power supply cord
(long)
Amplifier (R) (L)(R) (L)
Stereo connection cable (Short)
AC power supply cord
AC OUTLETS
~ AC IN
TAPE1 CD/AUX REC PLAY OUT BACK
TAPE2/EXT REC PLAY OUT BACK
GND PHONO TUNER
This terminal can be used if, in the future, a turntable with a ground wire is connected to this amplifier.
(R)(L)(R)(L)(R)(L)
AC power supply cord
Stereo connection cables (Short)
Stereo connection cable (included in compact disc player)
Note:
To use a graphic equalizer to make sound corrections while making recording, make the connections of the tape deck (RS-T16) and the graphic equalizer (option) as shown for system SD-A620.
Note that connections can be made in the same way to the "TAPE 2/EXT" terminals, but the amplifier's tape-monitor selector setting must be for "tape 2" (on pages 16, 18 and 21).
(R)(L)(R)(L)
Tape deck
~ AC IN
LINE IN LINE OUT
Compact disc player (R) (L)
Connect this cord to the AC outlet of the amplifier if the compact disc player is not connected.
AC power supply cord
R L
LINE OUT
AC OUTLET ~ AC IN

■ ACCESSORY

- AC power supply cord 1

SJA172–1 [M]
SJA172 [MC]



D

■ DISASSEMBLY INSTRUCTIONS

Ref. No. 1	How to remove the front panel.
Procedure 1	1. Remove the top cabinet. 2. Pull out the 4 knobs (❶ ~ ❹). 3. Remove the 3 screws (❺ ~ ❼). 4. Remove the 4 nuts (❽ ~ ⓫). 5. Remove the connector.

"ATTENTION SERVICER"
SOME CHASSIS COMPONENTS MAY HAVE SHARP EDGES. BE CAREFUL WHEN DISASSEMBLING AND SERVICING.

Remove the knob
Wind cellophane tape around the knob and put it the direction of the arrow as shown in Fig. 1.

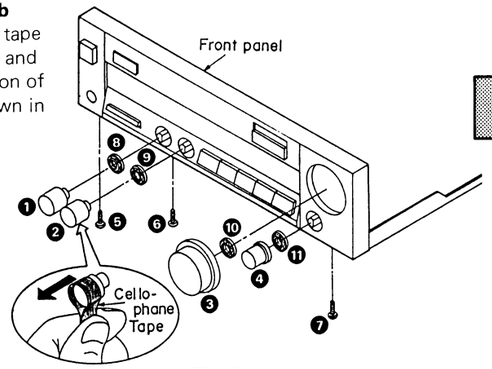


Fig. 1

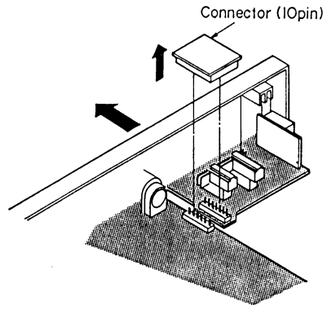


Fig. 2

Ref. No. 2	How to remove the P.C.B.
Procedure 1 →2	1. Remove the 2 tabs. 2. Remove the volume P.C.B. 3. Remove the 2 screws (❶ , ❷). 4. Remove the super bass P.C.B. 5. Remove the 3 screws (❸ ~ ❺). 6. Remove the selector P.C.B. 7. Remove the 2 screws (❻ , ❼). 8. Remove the power indicator P.C.B.

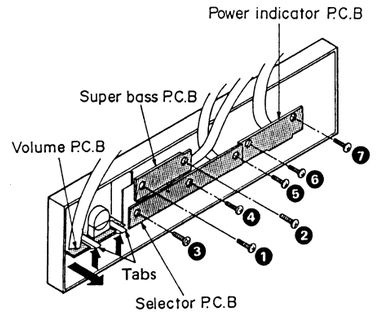


Fig. 3

9. Remove the power switch knob.
10. Remove the 1 screw (❽).
11. Remove the power switch P.C.B.

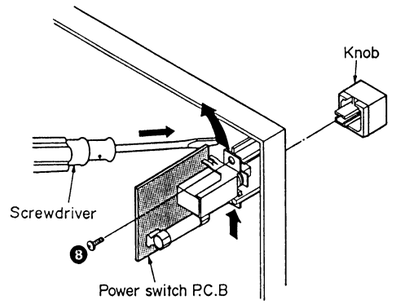


Fig. 4

Remove the knob by pusing it from behind the panel as shown in Fig. 4.

12. Remove the 1 tab.
13. Remove the headphones P.C.B.

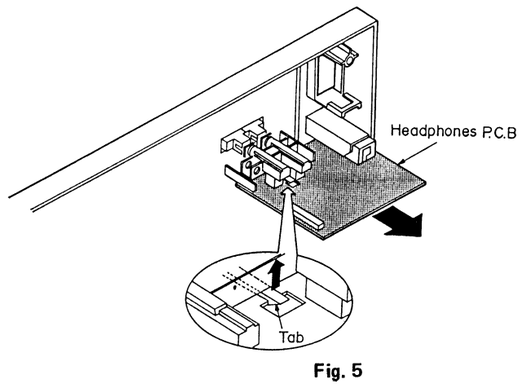


Fig. 5

Ref. No. 3	How to remove the main P.C.B.
Procedure 3	1. Remove the 9 screws (❶ ~ ❾). 2. Remove the main P.C.B.

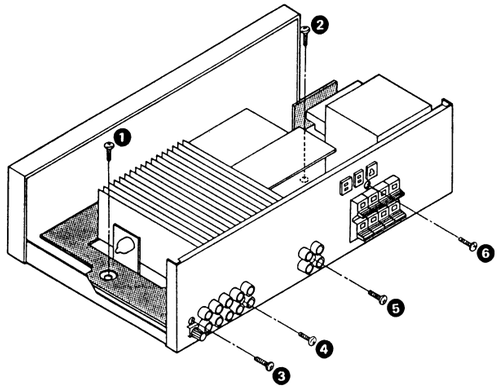


Fig. 6

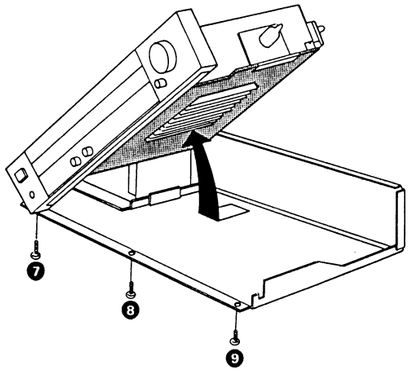


Fig. 7

Ref. No. 4	How to remove the power amplifier IC.
Procedure 3 →4	1. Unsolder the power IC. 2. Remove the 2 screws (❶ , ❷). 3. Remove the sub heat-sink. 4. Remove the 2 screws (❸ , ❹).

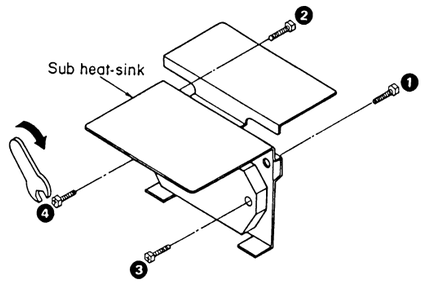


Fig. 8

- When mounting the power IC, apply silicon thermal compound (SZZ0L15 or equivalent) to the rear of the power IC.

Ref. No. 5	How to remove the bottom board
Procedure 5	Remove the 11 screws (❶ ~ ⓫).

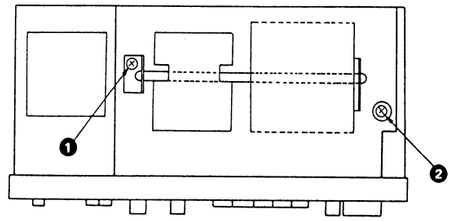


Fig. 9

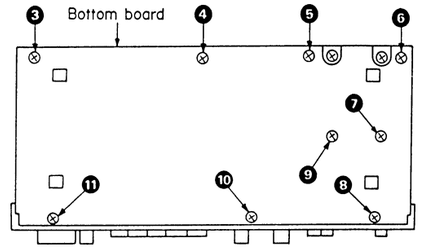


Fig. 10

■ BLOCK

PHONO
TUNER
CD / AUX
REC OUT
TAPE I
PLAYBACK
REC OUT
TAPE 2/EXT
PLAYBACK

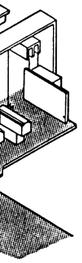
Comp
1 2 3
LED POW
LEVEL ME
D601, 603, 6

IC
METE

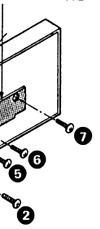
( ) indicate
right chan

NTS MAY HAVE
FUL WHEN
RVICING.

nector (10pin)



icator P.C.B



.B.

leadphones P.C.B

Ref. No. 3	How to remove the main P.C.B.
Procedure 3	1. Remove the 9 screws (❶ ~ ❾). 2. Remove the main P.C.B.

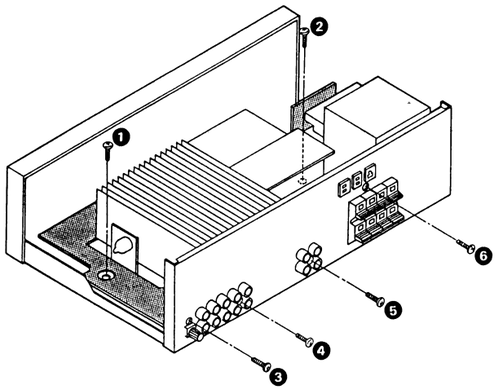


Fig. 6

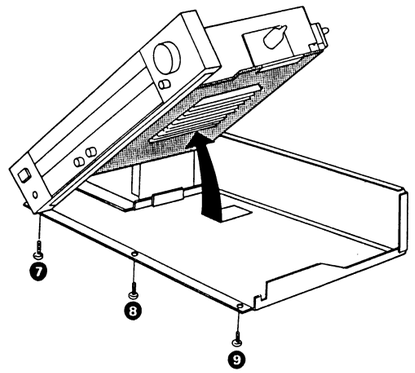


Fig. 7

Ref. No. 4	How to remove the power amplifier IC.
Procedure 3 →4	1. Unsolder the power IC. 2. Remove the 2 screws (❶ , ❷). 3. Remove the sub heat-sink. 4. Remove the 2 screws (❸ , ❹).

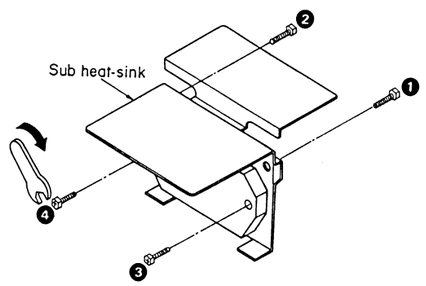


Fig. 8

- When mounting the power IC, apply silicon thermal compound (SZZ0L15 or equivalent) to the rear of the power IC.

Ref. No. 5	How to remove the bottom board
Procedure 5	Remove the 11 screws (❶ ~ ⓫).

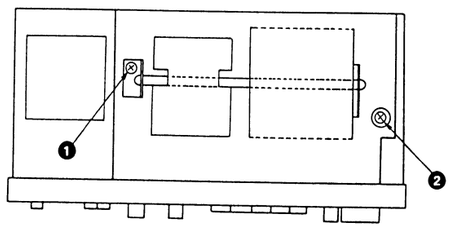


Fig. 9

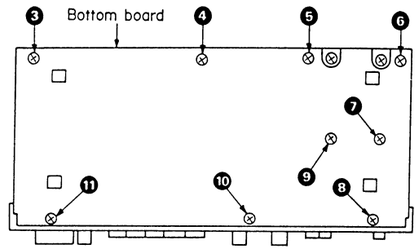
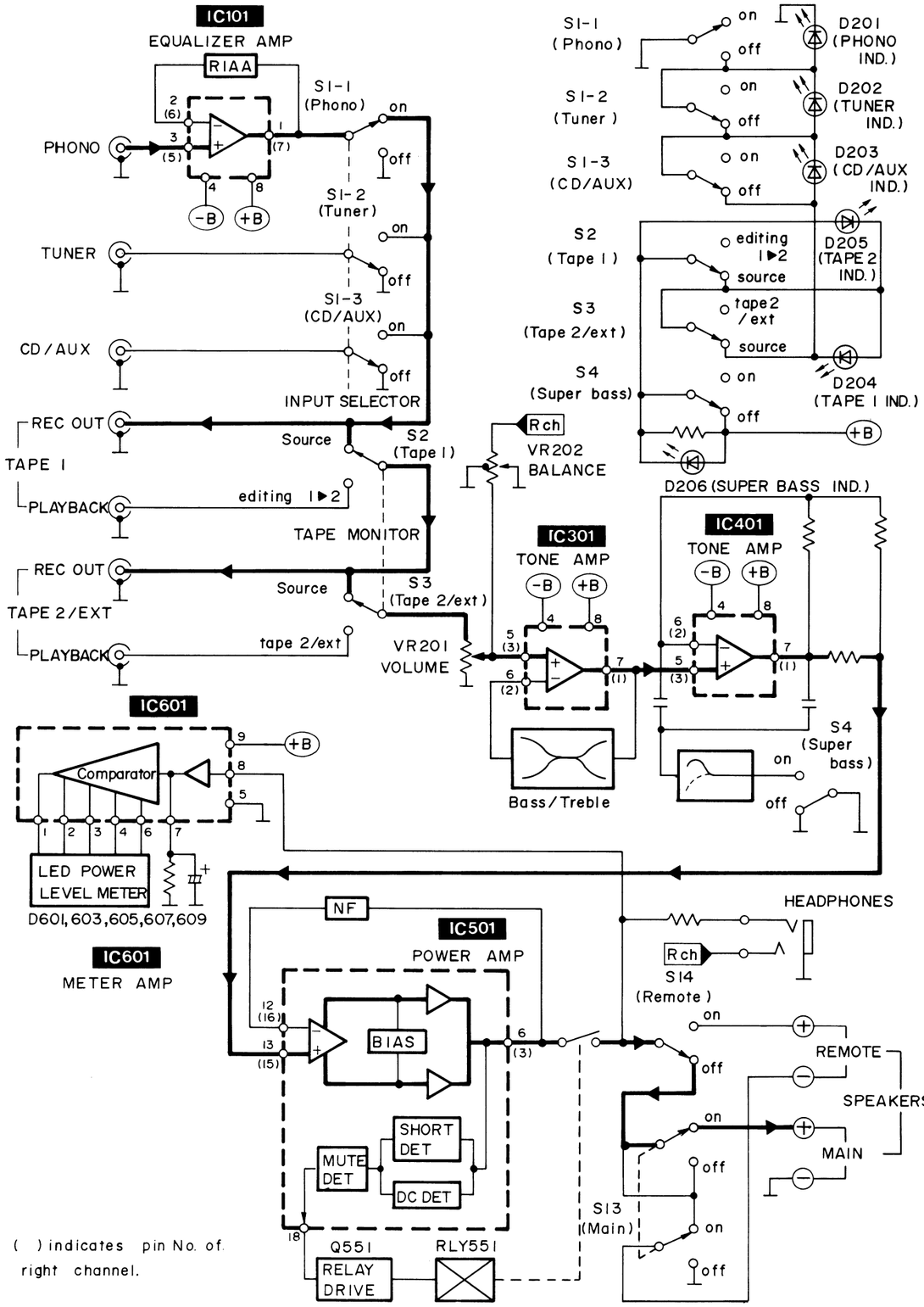


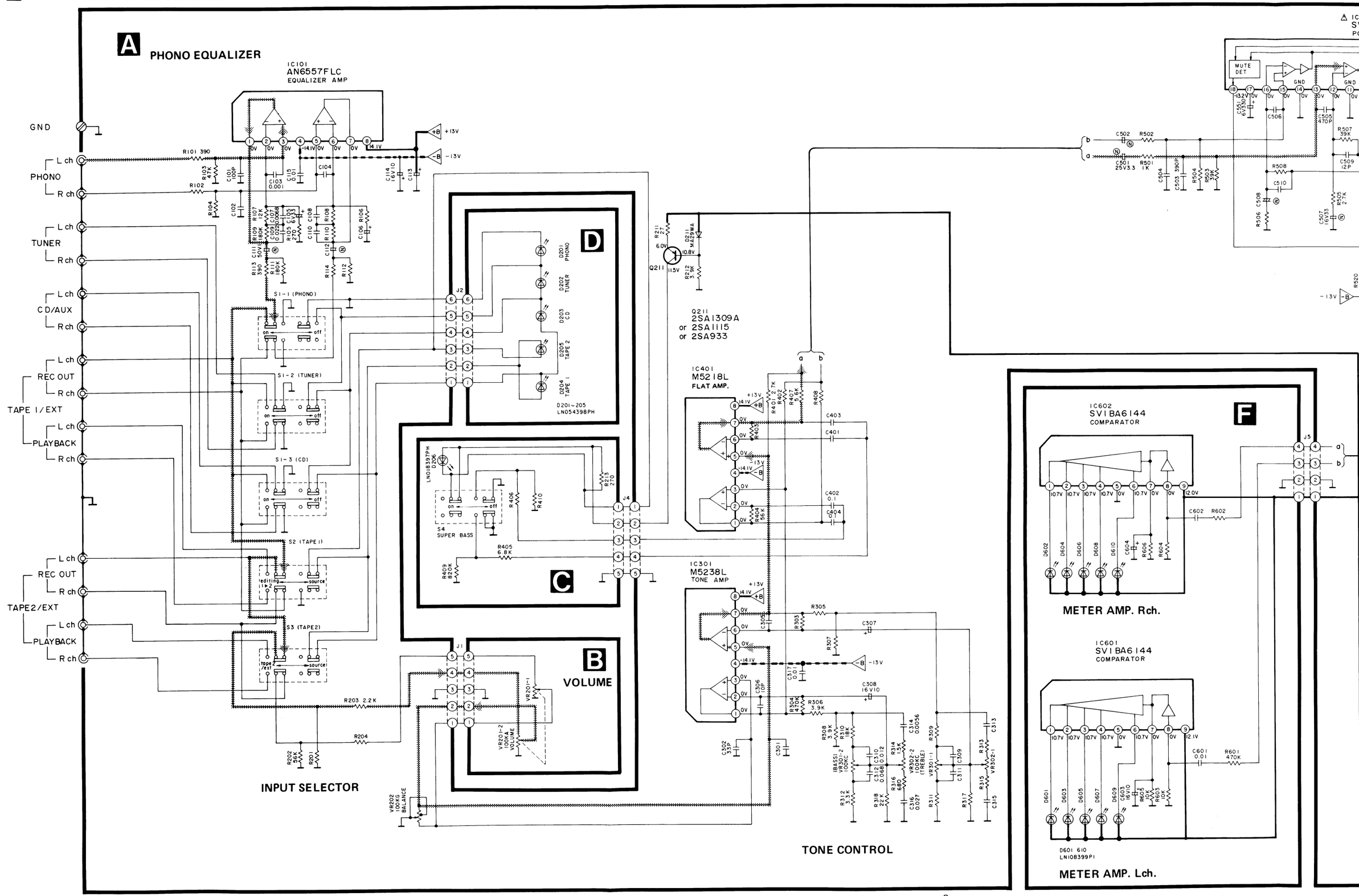
Fig. 10

■ BLOCK DIAGRAM



( ) indicates pin No. of right channel.

■ SCHEMATIC DIAGRAM



POWER AMPLIFIER

△ IC501
SV13105B
POWER AMP

MUTE DET · GND · GND · AC IN · -B · +B

C502 R502 · C501 25V3.3 R501 1K · C504 · C503 390P · R504 · R503 39K · C506 · C505 470P · R507 39K · C509 12P · C510 · C508 · R506 · C507 16V33 · R505 2.7K · Power ON 6s · C511 0.047 · R509 1/4 4.7 · C512 R510 · R508 · R511 10 · L501 · L502 · R512 · R551 1K · R552 12K · Q551 · D551 MA165 · RLY551 · △R554 8.2K · R553 2W 15K · R520 1/4 4.7 · -13V

Q551
2SA992
RELAY DRIVE

HEADPHONES · R513 2W 330 · R514 · J6 · S14 REMOTE · S13 MAIN

L ch MAIN R ch SPEAKERS L ch REMOTE R ch

-62.3V · 62.1V

Q211
2SA1309A
or 2SA1115
or 2SA933

R211 27 · D211 MA29WA · R212 3.9K

IC401
M5218L
FLAT AMP.

+13V · -13V · R401 2.7K · R402 · R407 4.7K · R408 · R403 · C403 · C401 · C402 0.1 · C404 · R404 4.7K · R405

J4 · R406 · R410 · R213 270

C

IC301
M5238L
TONE AMP

R305 · R303 · C305 · C307 · R307 · C317 0.01 · C308 16V10 · C306 10P · R304 · R306 3.9K · C302 33P · C301 · R308 3.9K · R310 18K · (BASS) VR301-2 100KC · C310 · C312 0.068 · C314 0.0056 · R314 13K · VR302-2 100KC (TREBLE) · R309 · VR301-1 · C309 · C311 · R311 · R317 · R312 3.3K · R318 22K · R316 680 · C316 0.027 · R313 · C313 · VR302-1 · R315 · C315

TONE CONTROL

B
VOLUME

VR201-1

D201 PHONO · D202 TUNER · D203 CD · D205 TAPE 2 · D204 TAPE 1

D201~205
LN054398PH

D

F

IC602
SV1BA6144
COMPARATOR

J5 · C602 · R602 · D602 · D604 · D606 · D608 · D610 · C604 · R606 · R604

METER AMP. Rch.

IC601
SV1BA6144
COMPARATOR

C601 0.01 · R601 470K · D601 · D603 · D605 · D607 · D609 · C603 16V10 · R605 · R603

D601 610
LN108399PI

METER AMP. Lch.

R556 150K

D701~704
SVDS3V20

+13V · -13V · R703 · R701 2W 1.8K · R704 120 · R702 2W 1.8K · D703 MA150 · D706 MA150 · C703 · C704 · D704 · D703 · D702 · D701 · C702 .001 · AC46.1V · AC46.5V · AC9.9V · D711 1SR35200 · C711 16V470

J7 · T701

I

J

H

G

S15 (POWER) · C701 0.01 · F1 5A 125V · AC OUTLET (SWITCHED) · AC OUTLET (SWITCHED) · AC 120V (60Hz)

Notes:

1. S1-1 ~ S1-3 : Input selector in "Tuner" position.
   S1-1 : phono
   S1-2 : tuner
   S1-3 : CD/aux
2. S2 : Tape monitor selector "Tape" switch.
3. S3 : Tape monitor selector, "Tape 2/ext" switch.
4. S4 : Super bass switch in "off" position.
5. S13 : Main speakers switch in "on" position.
6. S14 : Remote speakers switch in "off" position.
7. S15 : Power source switch in "on" position.
8. Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.
   Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
   Measurement condition:
   Input selector — phono (no signal)
   Volume — Minimum
   Loudness — off
9. Positive (+B) voltage lines
10. Negative (—B) voltage lines
11. Signal lines (L channel)
12. Important safety notice:
    Components identified by ⚠ mark have special, characteristics important for safety.
    When replacing any of these components, use only manufacturer's specified parts.

*** Caution !**

IC and LSI are sensitive to static electricity. Secondary trouble can be prevented by taking during repair.

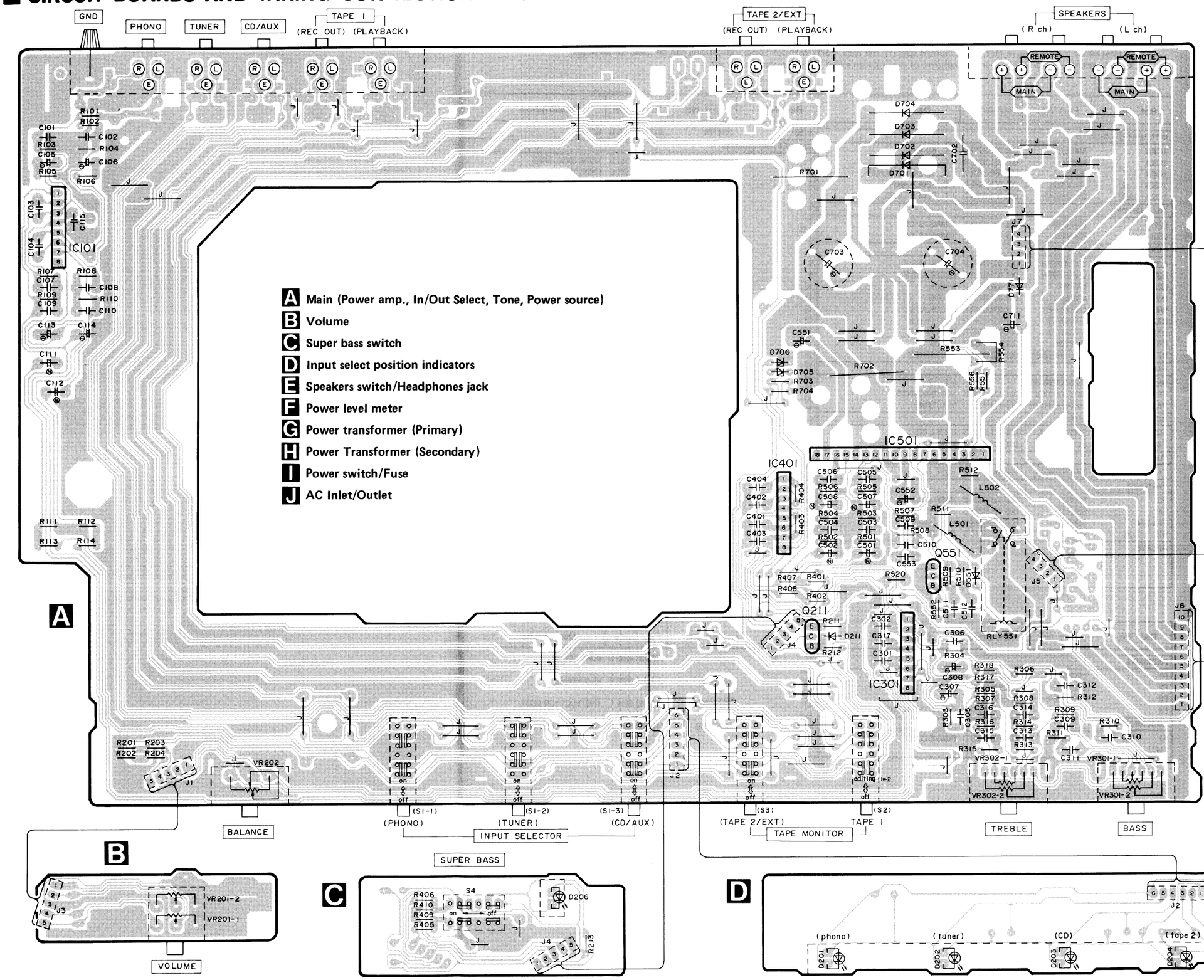
* Cover the parts boxes made of plastics with aluminum foil.
* Ground the soldering iron.
* Put a conductive mat on the work table.
* Do not touch the legs of IC or LSI with the fingers directly.

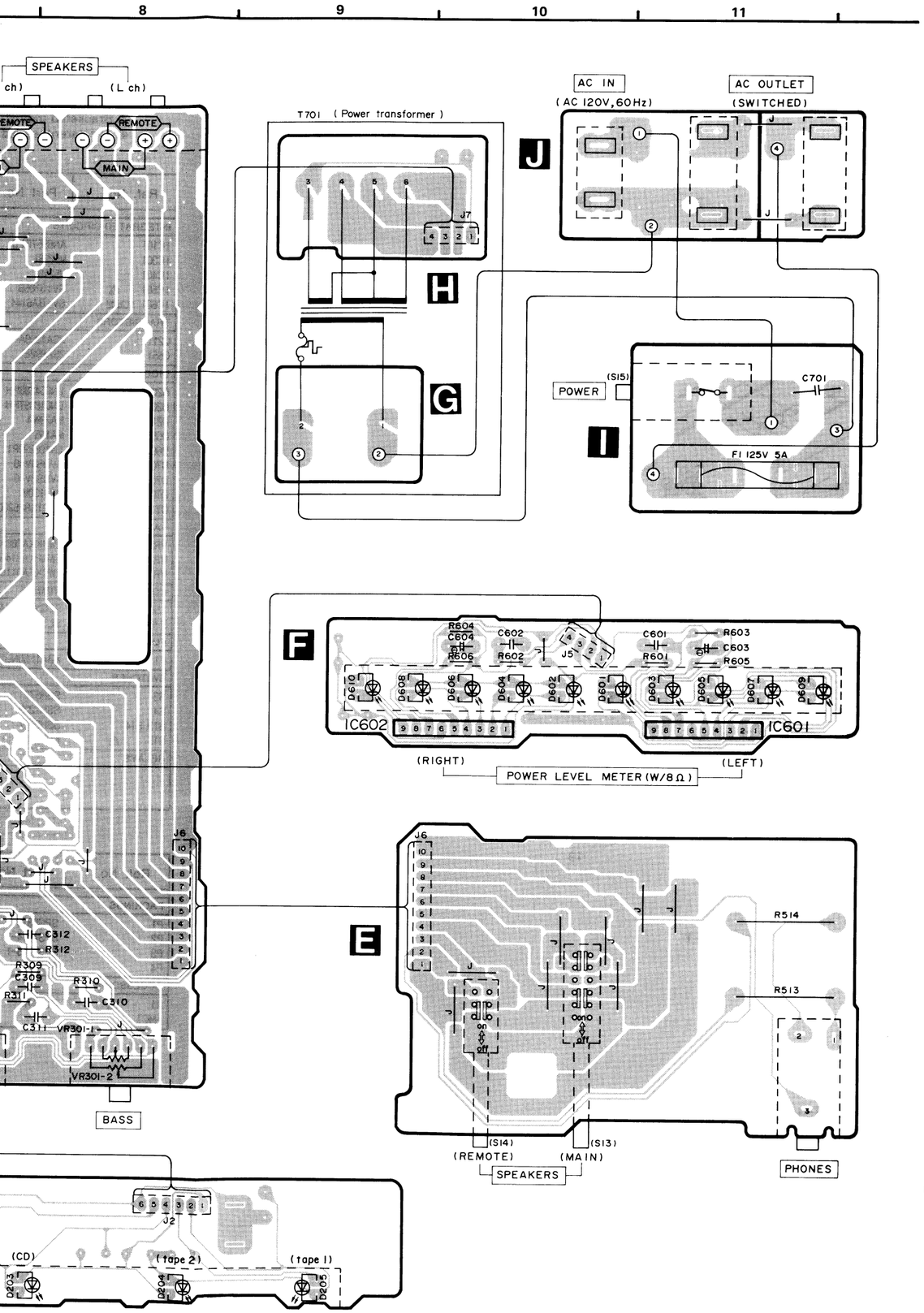
FUSE CAUTION

This symbol located near the fuse indicates that the fuse used is fast operating type. For continued protection against fire hazard, replace with same type fuse. For fuse rating, refer to the marting adjacent to the symbol.

Ce symbol indique que le fusible utilisé est à rapide. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là qù le présent symbol est apposé.

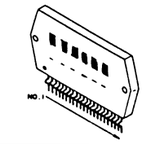
■ CIRCUIT BOARDS AND WIRING CONNECTION DIAGRAM



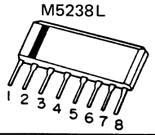


• Terminal guide of transistors, diodes and IC's

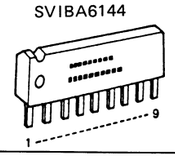
SVI3105B 18pin



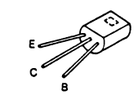
AN6557FLC
M5218L
M5238L



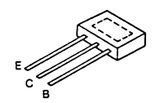
SVIBA6144



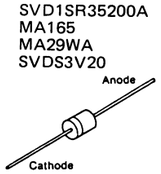
2SA992E



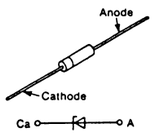
2SA1309Q



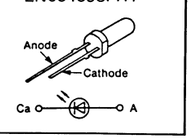
SVD1SR35200A
MA165
MA29WA
SVDS3V20



MA4130M



LN108399P
LN018397PH
LN054398PH1



■ RESISTORS & CAPACITORS

Notes: * Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* Bracketed indications in Ref. No. columns specify the area.
Parts without these indications can be used for all areas.

Numbering System of Resistor

Example

ERD	25	F	J	102
Type	Wattage	Shape	Tolerance	Value (10)x10²ohms

ERX	2	AN	J	471
Type	Wattage	Shape	Tolerance	Value (47)x10¹ohms

Numbering System of Capacitor

Example

ECKD	1H	102	Z	F
Type	Voltage	Value (10x10²)x10⁻⁶ microfarad	Tolerance	Peculiarity

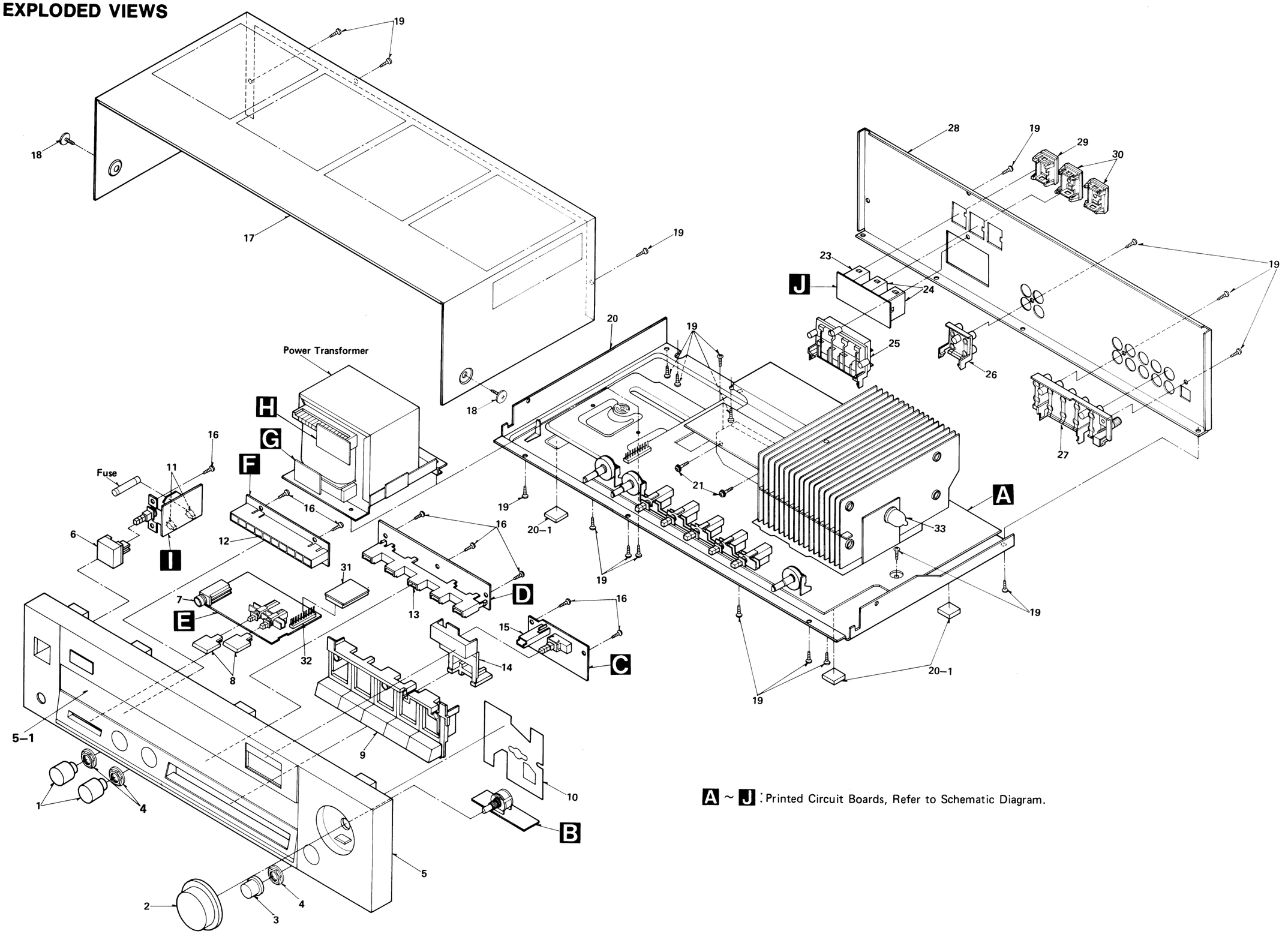
ECEA	50	M	331
Type	Voltage	Peculiarity	Value (33)x10¹ microfarad

Resistor Type	Wattage	Tolerance
ERD : Carbon ERG : Metal Oxide ERX : Metal Film ERQ : Fuse Type Metal ERD□ L : Carbon (chip) ERO□ K : Metal Film (chip) ERC : Solid	10 : 1/8W 18 : 1/8W S2 : 1/4W 2F : 1/4W 50 : 1/2W S1 : 1/2W 12 : 1/2W 25 : 1/4W 1A : 1W 2A : 2W	F : ±1% G : ±2% J : ±5% K : ±10%

Capacitor Type	Voltage	Tolerance
ECE : Electrolytic ECCD : Ceramic ECKD : Ceramic ECQM : Polyester ECQP : Polyproylene ECG : Ceramic ECEA□□□N: Non Polar Electrolytic QCU□ : Ceramic (Chip Type) ECUX : Ceramic (Chip Type) ECF : Semiconductor EECW : Liquid electrolyte double layer capcitor	0J : 6.3V 1A : 10V 1C : 16V 1E : 25V 1V : 35V 1H : 50V 1J : 63V 50 : 50V 05 : 50V 2A : 100V 1 : 100V 2H : 500V KC : 400V AC KC : 125V AC (UL)	C : ±0.25pF D : ±0.5pF G : ±2% J : ±5% K : ±10% M : ±20% Z : +80% –20% P : +100% –0%

Ref. No.	Part No.	Part Code
RESISTORS		
R101, R102	ERDS2TJ391	001 152 2360 6
R103, R104	ERDS2TJ473	001 152 2363 3
R105, R106	ERDS2TJ271	001 152 2435 4
R107, R108	ERDS2TJ123	001 152 2424 7
R109, R110	ERDS2TJ184	001 152 2588 8
R111, R112	ERDS2TJ184	001 152 2588 8
R113, R114	ERDS2TJ391	001 152 2360 6
R201, R202	ERDS2TJ563	001 152 2446 1
R203, R204	ERDS2TJ222	001 152 2353 5
R211	ERDS2TJ270	001 152 2434 5
R212	ERDS2TJ392	001 152 2439 0
R213	ERDS2TJ271	001 152 2435 4
R303, R304	ERDS2TJ474	001 152 2443 4
R305, R306	ERDS2TJ392	001 152 2439 0
R307, R308	ERDS2TJ392	001 152 2439 0
R309, R310	ERDS2TJ183	001 152 2429 2
R311, R312	ERDS2TJ332	001 152 2357 1
R313, R314	ERDS2TJ152	001 152 2350 8
R315, R316	ERDS2TJ681	001 152 2449 8
R317, R318	ERDS2TJ223	001 152 2432 7
R401, R402	ERDS2TJ272	001 152 2354 4
R403, R404	ERDS2TJ563	001 152 2446 1
R405, R406	ERDS2TJ682	001 152 2365 1
R407, R408	ERDS2TJ562	001 152 2445 2
R409, R410	ERDS2TJ824	001 152 2457 8
R501, R502	ERDS2TJ102	001 152 2346 4
R503, R504	ERDS2TJ393	001 152 2440 7
R505, R506	ERDS2TJ272	001 152 2354 4
R507, R508	ERDS2TJ393	001 152 2440 7
R509, R510	ERD25FJ4R7	001 152 0303 3
R511, R512	ERDS2TJ100	001 152 2420 1
R513, R514	ERG2ANJ331	001 151 0154 3
R520	ERD25FJ470	001 152 0309 7
R551	ERDS2TJ473	001 152 2363 3
R552	ERDS2TJ123	001 152 2424 7
R553 ⚠	ERG2ANJ152	001 151 0130 1
R554	ERDS2TJ822	001 152 2455 0
R556	ERDS2TJ154	001 152 2427 4
R601, R602	ERDS2TJ474	001 152 2443 4
R603, R604	ERDS2TJ103	001 152 2347 3
R605, R606	ERDS2TJ103	001 152 2347 3
R701, R702 ⚠	ERG2ANJ182	001 151 0135 6
R703, R704	ERDS2TJ121	001 152 2349 1
CAPACITORS		
C101, C102	ECCD1H101K	001 103 0341 2
C103, C104	ECKD1H102KB	001 103 1414 8
C105, C106	ECEA0JK330	001 120 0141 1
C107, C108	ECFTD682KXL	001 108 0363 1
C109, C110	ECFTD223KXL	001 108 0342 6
C111, C112	ECEA1HN0101S	001 120 0354 0
C113, C114	ECEA1CKS100	001 120 2600 7
C115	ECKD1H103PF	001 103 1449 7
C301, C302	ECCD1H330K	001 103 0567 6
C305, C306	RCBS1H100JLY	001 103 5564 9
C307, C308	ECEA1CKS100	001 120 2600 7
C309, C310	ECFTD123KXL	001 108 0745 1
C311, C312	ECFTD683KXL	001 108 0346 2
C313, C314	ECFTD562KXL	001 108 0904 4
C315, C316	ECFTD273KXL	001 108 0343 5
C317	ECKD1H103PF	001 103 1449 7
C401, C402	ECFTD104KXL	001 108 0793 3
C403, C404	ECFTD104KXL	001 108 0793 3
C501, C502	ECEA1EN3R3S	001 120 0296 3
C503, C504	ECKD1H391KB	001 103 1544 9
C505, C506	ECKD1H471KB	001 103 1551 0
C507, C508	ECEA1CN330S	001 120 0240 9
C509, C510	RCBS1H120JLY	001 103 5578 3
C511, C512	ECQM1H473JZ	001 106 0810 9
C551	ECEA0JS331	001 120 2975 9
C552	ECEA1HS330	001 120 0383 5
C553	ECQM1H224JZ	001 106 0746 0
C601, C602	ECKD1H103PF	001 103 1449 7
C603, C604	ECEA1CKS100	001 120 2600 7
C701	ECKWNS103ZV	001 103 8209 3
C702	ECKD2H103PE	001 103 1626 8
C703, C704 ⚠	ECES71V103VN	001 120 5525 9
C711 ⚠	ECEA1CU471	001 120 3202 3

■ EXPLODED VIEWS



A ~ **J** : Printed Circuit Boards, Refer to Schematic Diagram.

■ REPLACEM

Notes:

1. Part numbers are i
2. Important safety n
   When replacing an
3. Bracketed indicati
4. The parenthesized

Ref. No.	Part No.
INTEGRATED CIRCUITS	
IC101	AN6557FLC
IC301	M5238L
IC401	M5218L
IC501 ⚠	SVI3105B
IC601, IC602	SVIBA6144
TRANSISTORS	
Q211	2SA1309A-R
Q551	2SA992E
DIODES	
D201-, D205	LN054398PH
D206	LN018397PH
D211	MA29WA
D551	MA165
D601-, D610	LN108399P1
D701, D702 ⚠	SVDS3V40
D703, D704 ⚠	SVDS3V40
D705, D706	MA4130M
D711 ⚠	SVD1SR35200A
VARIABLE RESISTORS	
VR201	EWJKXA066A15
VR202	EWHFKA014G15
VR301, VR302	EWCXEA011C15
COILS AND TRANSFORMERS	
L501, L502	SLQY07G-4A
T701 ⚠	SLT5P268-KK
FUSES	
F1 ⚠	XBA1F50NU14
SWITCHES	
S3	SSH579
S4	SSH1228
S13, S14	SSH2127
S15 ⚠	ESB8249V
RELAYS	

Ref. No.	Part No.
PACKINGS	
P1	SPG5876
P2	SPS4714-1
P3	SPS4715-1
P4	SPP723
ACCESSORIES	
A1 ⚠ (MC)	SJA172

■ REPLACEMENT PARTS LIST

Notes:

1. Part numbers are indicated on most mechanical parts. Please use this part number for parts order.
2. Important safety notice: Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
4. The parenthesized numbers in the column of description stand for the quantity per set.

Ref. No.	Part No.	Part Code	Description
INTEGRATED CIRCUITS			
IC101	AN6557FLC	001 061 2819 8	I.C., EQ AMP
IC301	M5238L	001 061 3522 8	I.C., TONE AMP
IC401	M5218L	001 060 3798 7	I.C., OPERATION AMP.
IC501 ⚠	SVI3105B	001 061 4021 0	I.C., POWER AMP
IC601, IC602	SVIBA6144	001 060 8320 1	I.C., POWER LEBEL METER
TRANSISTORS			
Q211	2SA1309A-R	001 030 6079 7	TRANSISTOR
Q551	2SA992E	001 030 0513 4	TRANSISTOR
DIODES			
D201-, D205	LN054398PH	001 033 0135 5	DIODE ASS'Y
D206	LN018397PH	001 033 0129 3	DIODE ASS'Y
D211	MA29WA	001 032 7250 0	DIODE
D551	MA165	001 032 0494 0	DIODE
D601-, D610	LN108399P1	001 033 0140 8	DIODE ASS'Y
D701, D702 ⚠	SVDS3V40	001 032 1347 6	RECTIFIER
D703, D704 ⚠	SVDS3V40	001 032 1347 6	RECTIFIER
D705, D706	MA4130M	001 032 4960 9	DIODE
D711 ⚠	SVD1SR35200A	001 032 3951 4	RECTIFIER
VARIABLE RESISTORS			
VR201	EWJKXA066A15		V.R., MAIN
VR202	EWHFKA014G15	001 174 9116 6	**V.R. BALANCE**
VR301, VR302	EWCXEA011C15	001 174 7737 1	**V.R. TONE**
COILS AND TRANSFORMERS			
L501, L502	SLQY07G-4A	001 211 4090 3	CHOKE COIL
T701 ⚠	SLT5P268-KK	001 202 8992 9	POWER TRANSFORMER
FUSES			
F1 ⚠	XBA1F50NU14	002 380 0324 8	FUSE, 5A 125V
SWITCHES			
S3	SSH579	003 435 6326 2	PUSH SWITCH
S4	SSH1228	003 435 6328 0	PUSH SWITCH
S13, S14	SSH2127	003 435 6328 0	PUSH SWITCH
S15 ⚠	ESB8249V	003 435 5877 0	POWER SWITCH
RELAYS			
RY551	SSY126	003 450 2686 0	RELAY
CABINET AND CHASSIS			
1	SBN1032-4	016 700 1857 9	KNOB, BASS, TREB
2	SBN1225	016 700 1981 6	KNOB, VOL
3	SBN1226	016 700 1980 7	KNOB, BARANCE
4	SNE4021	005 507 0372 5	NUT
5	SGYUV76-KM	016 840 7670 3	FRONT PANEL
5-1	SGU556A	016 842 1630 5	FILTER
5-2	SGX7904A	016 846 3787 7	**ORNAMENT, SUPER BASS**
6	SBC666-1	016 702 6076 0	BUTTON
7	SJJ134B	003 400 7050 0	JACK, HEADPHONES
8	SBC938	016 702 7019 5	BUTTON
9	SBC940	016 702 7031 9	BUTTON
10	SMC6438	016 601 0624 0	SHIELD COVER
11	SJT391	003 410 7242 8	LUG TERMINAL
12	LN108399P1	001 033 0140 8	DIODE ASS'Y
13	LN054398PH	001 033 0135 5	DIODE ASS'Y
14	SBC939	016 702 7030 0	BUTTON
15	LN018397PH	001 033 0129 3	DIODE ASS'Y
16	XTB3+8G	005 501 2607 7	SCREW
17	SKC1950K991	016 800 2611 8	CABINET
18	SNE2129-1	005 500 7938 6	SCREW
19	XTB3+8JFZ1	005 501 2523 0	SCREW
20	SKUUV76-KM	016 802 2186 4	BOTTOM BOARD
20-1	SKL293	016 828 0269 8	RUBBER
21	SNE2118	005 500 5011 2	SCREW
22	XTW3+8T	005 501 1358 9	SCREW
23 ⚠	SJS9234B	003 400 5922 5	**AC INLET**
24 ⚠	SJS9233B	003 402 1993 6	**AC OUTLET**
25	SJF5812	003 410 8155 2	TERMINAL PLATE
26	SJF3057NK	003 410 8123 0	TERMINAL BOARD
27	SJF3062-1NK	003 410 8154 3	TERMINAL PLATE
28	SGPUV76-KM	016 840 7660 5	REAR PANEL
29	SJS9234A	003 400 5921 6	AC INLET COVER
30	SJS9233A	003 410 6004 4	**AC OUTLET COVER**
31	SJS54	003 400 7801 5	SOCKET(10P)
32	SJT3041	003 410 8161 4	TERMINAL PLATE
33	SXE1156	016 630 1846 1	HEAT SINK

Ref. No.	Part No.	Part Code	Description
PACKINGS			
P1	SPG5876	016 971 5022 7	PACKING CASE
P2	SPS4714-1	016 977 3297 0	PAD
P3	SPS4715-1	016 977 3296 1	PAD
P4	SPP723	016 978 0207 5	PROTECTION COVER
ACCESSORIES			
A1 ⚠ (MC)	SJA172	003 490 4069 7	POWER CORD
A1 ⚠ (M)	SJA172-1	003 490 4930 5	POWER CORD
A2 (MC)	SPB1155	016 918 0632 8	HEADHONES
A3 (M)	SQF12869	016 983 5111 1	INSTRUCTION BOOK
A3 (MC)	SQF12870	016 983 5152 2	INSTRUCTION BOOK

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Service Manual

Supplement

Stereo Integrated Amplifier

Amplifier

SU-V76

Color

(K).....Black Type

Area

Color	Area
(K)	(PA).....Far East PX.
(K)	(PE).....European Military.

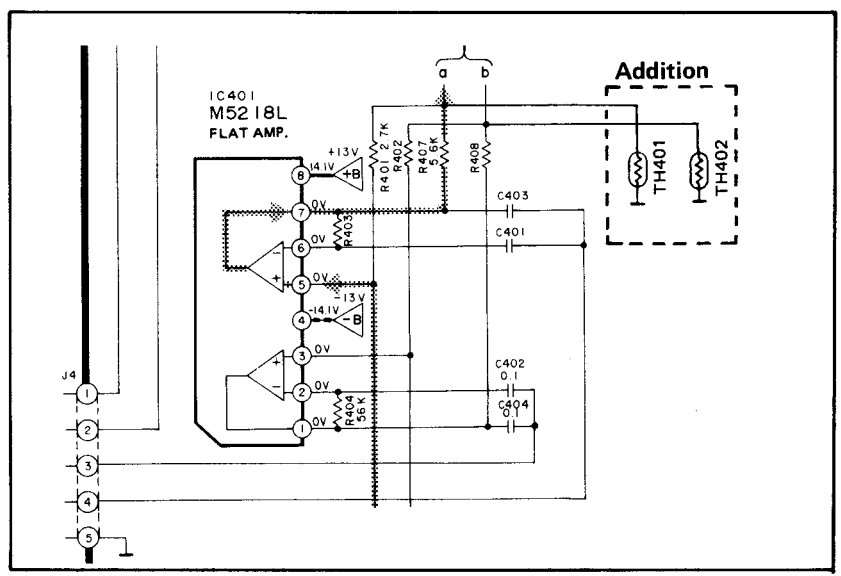
Please use this supplement manual together with the service manual for Model No. SU-V76, Order No. HAD8706174A4.

Notes:

* The circuit of SU-V76 has been changed for the improvement of performance.
* This supplement should be filed with the service manual for Model No. SU-V76, Order No. HAD8706174A4.

CHANGES

■ SCHEMATIC DIAGRAM



■ REPLACEMENT PARTS LIST

Ref No.	Change of Part No. OLD	→ NEW	Part Name & Description	Remarks
T701 ⚠	SLT5P279	**SLT5P282**	Power-transformer, Power Source	Change
TH401, 402	– – – – –	**RRT104**	Thermistor, Temperature Detector	Addition

Technics

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